

CADDO LAKE WATERSHED PROTECTION PLAN

The Caddo Lake watershed is a rich and unique ecosystem that straddles the Texas-Louisiana border. Historical, current, and possible future stressors on this system may destroy aspects of the lake that make it so valuable to humans and wildlife.

An effort to protect the water quality and aquatic life of Caddo Lake is taking shape. This effort is being referred to as the Caddo Lake Watershed Protection Plan.

The Caddo Lake Watershed Protection Plan relies heavily on volunteers, although federal, state, and local organizations are actively participating in this effort. Many public and private organizations already are working to protect Caddo Lake and the new Watershed Protection Plan will seek to incorporate these actions into the plan and to examine what additional actions are needed to assure the health of the watershed.

Caddo Lake and its watershed face a number of challenges that have been identified by the stakeholders. These issues include point and non-point pollution affecting water quality; drought and water withdrawals; threats to habitats; floodplain management; and managing aquatic vegetation. Stakeholders are given the opportunity to identify additional issues and will help set priorities in the Caddo Lake Watershed Protection Plan as it is developed.

With the goal of developing a watershed plan designed to restore and protect water quality and improve aquatic habitat and in close cooperation with the TCEQ, the Caddo Lake Watershed Steering Committee has formed three workgroups to address and develop five major components of the Caddo Lake Watershed Protection Plan. These components were identified as a result of stakeholder input and are the following:

- **Water Quality:** Low dissolved oxygen and low pH (acidity) in water and mercury in fish tissue are the current impairments to the aquatic life and fish consumption uses. Concerns for future impairments are nutrient enrichment (from ammonia) and sediment contamination (from barium, mercury, selenium, lead, and zinc). Air emissions are also a concern because, for most water bodies in the United States, air deposition is a major source of mercury in fish tissue.
- **Water Quantity:** This issue includes the amount of water in the Cypress Creek system, the impacts of drought and water withdrawals, and a flow regime that is significantly controlled by upstream impoundments on Big Cypress Creek. The timing and amount of flow has significant consequence to aquatic and riparian habitats in the lower reach of Big Cypress Creek and Caddo Lake.
- **Aquatic and Riparian Habitat:** Changes in land and water uses have altered critical aquatic and riparian habitat, and are forecasted to continue to do so.

- Floodplain Management: Development in vulnerable areas of the Cypress Creek floodplain may be occurring as a result of inaccurate or missing floodplain maps.
- Aquatic Vegetation: This issue includes the role of potential management strategies for native and exotic invasive vegetation. The Invasive aquatic vegetation in the watershed to be controlled includes giant salvinia, water hyacinth, and hydrilla.